AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 8, line 4, with the following rewritten paragraph.

--~~FIG. 2~~ FIGS. 2(a) to 2(c) ~~shows~~ show an example of a cutter wheel used in the present invention; FIG. 2(a) is an external lateral view of the cutter wheel taken from the rotation axis direction; FIG. 2(b) is an external front view of the cutter wheel taken from a direction perpendicular to the rotation axis direction; FIG. 2(c) is a magnification of the blade ridge portion A shown in FIG. 2(a).--

Please replace the paragraph beginning at page 11, line 6, with the following rewritten paragraph.

--The cutter wheel ~~8 (8A) show~~ shown in ~~FIG. 2~~ FIGS. 2(a) to 2(c) is of the type that applies impacts of a short period to the point on the surface of the brittle material substrate G. FIG. 2(a) is an external lateral view of the cutter wheel 8A seen from a rotation axis direction, and FIG. 2(b) is an external front view of the cutter wheel 8A seen from a direction at right angles to the rotation axis. Moreover, FIG. 2(c) is a magnification of a blade ridge portion A. Here, as shown in FIG. 8(c), protrusions 12 with a height h are arranged at a spacing of a pitch P by cutting out U-shaped grooves 11 in the blade ~~ridge~~ edge 10 of the cutter wheel 8A.--

Please replace the paragraph beginning at page 11, line 15, with the following rewritten paragraph.

--The cutter wheel 8A given as an example here has a wheel diameter ϕ of 2.5 mm, a wheel thickness W of 0.65 mm, a blade angle 2θ of 125°, ~~a protrusion number of~~ 125 protrusions, a protrusion height h of 5 μm, and a pitch P of 63 μm. FIG. 3 shows a glass cross section when a glass sheet G of 1.1 mm thickness has been scribed using this cutter wheel 8A under the conditions of 0.35 N blade load and 300 mm/sec scribe speed.--

Please replace the paragraph beginning at page 11, line 21, with the following rewritten paragraph.

--In FIG. 3, the impression L in the upper surface of the glass sheet is generated by press-rolling the cutter wheel 8A over the upper surface of the glass sheet G, and is referred to as "scribe line" (this line extends in the direction perpendicular to the paper plane). Simultaneously to the engraving of this scribe line L, a crack (vertical crack) K extending vertically downward from the scribe line L is generated, and in this case, a long crack (962 μm according to an actual measurement) that penetrates the glass sheet almost completely in thickness direction is generated, that is, a high-penetration vertical crack is generated.--

Please replace the paragraph beginning at page 11, line 30, with the following rewritten paragraph.

--Thus, with the above-described cutter wheel 8A, horizontal cracks are not generated even when the blade load is made large, and a vertical crack K with a high penetration that is proportional to the magnitude of the load is attained. If the vertical crack K that is attained during scribing in this manner has a high penetration, then it is possible to perform accurate breaking along the scribe line in the breaking operation of the next step, increasing the yield. Moreover, since the breaking operation is easy, the content of the breaking step can be eased or simplified.--

Please replace the paragraph beginning at page 12, line 8, with the following rewritten paragraph.

--FIGS. 4 to 6 are partial magnifications showing the circumferential ridge portion of other cutter wheels. The cutter wheel 8B of FIG. 4 is an example of protrusions 121 having a shape that is different from the above-described cutter wheel 8A, and has protrusions 121 formed by cutting out V-shaped grooves 111 in a blade ~~ridge~~ edge 101.--

Please replace the paragraph beginning at page 12, line 13, with the following rewritten paragraph.

--The cutter wheel 8C shown in FIG. 5 is an example of protrusions 122 having a shape that is again different from the cutter wheels 8A and 8B, and has protrusions 122 formed by cutting out sawtooth-shaped grooves 112 in a blade ~~ridge~~ edge 102.--

Please replace the paragraph beginning at page 12, line 17, with the following rewritten paragraph.

--The cutter wheel 8D shown in FIG. 6 is an example of protrusions 123 having a shape that is different from the above-described cutter wheels, and has protrusions 123 formed by cutting out rectangular grooves 113 in a blade ~~ridge~~ edge 103.--

Please replace the paragraph beginning at page 17, line 13, with the following rewritten paragraph.

--As shown in FIG. 10, five first scribe lines L1 to L5 and five second scribe lines L6 to L10 were scribed into a glass sheet G of 0.7 mm thickness serving as the brittle material substrate, and the incidence rate of the above-noted chipping, chafing and splintering were determined for all 25 intersections between the first and second scribe lines. It should be noted that what is referred to below as the magnitude of the splintering is the dimension indicated by the letter m in FIG. 11, and the magnitude of the chipping is the dimension indicated by the letter n in FIG. 12.--

Please replace the paragraph beginning at page 17, line 21, with the following rewritten paragraph.

--As for the scribe parameters, the travel speed of the cutter wheel was set to 300 mm/sec, and the set depth before the cutter wheel is lifted onto the glass plate (see letter d in FIG. 13), that is, the cut-in amount was set to 0.15 mm. It should be noted that the reference numeral 8 in the figure denotes the cutter wheel, and ~~G'~~ G denotes the glass sheet. Moreover, the blade load P1 that is applied to the cutter wheel 8 for the formation of the first scribe lines L1 to L5 was set to the four values 0.15 MPa, 0.20 MPa, 0.25 MPa and 0.30 MPa, and the blade load P2 that is applied to the cutter wheel 8 for the formation of the second scribe lines L6 to L10 was set to the four values 0.15 MPa, 0.20 MPa, 0.25 MPa and 0.30 MPa.--

Please replace the paragraph beginning at page 18, line 9, with the following rewritten paragraph.

--As becomes clear from these figures, if the relation between the blade load P1 with respect to the cutter wheel 8 when forming the first scribe lines L1 to L5 and the blade load P2 with respect to the cutter wheel 8 when forming the second scribe lines L6 to L10 is set to P1 > P2, then the incidence rates of splintering, chipping and chafing decrease.--

Please replace the paragraph beginning at page 18, line 16, with the following rewritten paragraph.

--Scribing was performed with the same parameters as in Working Example 1, except that the travel speed of the cutter wheel 8 was set to 100 mm/sec, the blade load P1 that is applied to the cutter wheel 8 for the formation of the first scribe lines L1 to L5 was set to the three values 0.15 MPa, 0.20 MPa and 0.25 MPa, and the blade load P2 that is applied to the cutter wheel 8 for the formation of the second scribe lines L6 to L10 was set to the three values 0.15 MPa, 0.20 MPa and 0.25 MPa.--

Please replace the paragraph beginning at page 18, line 30, with the following rewritten paragraph.

--As becomes clear from these figures, if the relation between the blade load P1 with respect to the cutter wheel 8 when forming the first scribe lines L1 to L5 and the blade load P2 with respect to the cutter wheel 8 when forming the second scribe lines L6 to L10 is set to P1 > P2, then the incidence rates of splintering, chipping and chafing decrease.--